Notes from the Dark Energy Survey (DES) DECam Project Working Group Meeting (WGM) Friday, Aug 3, 2007 10:00 – 12:00 Noon in the Snake Pit

Attending: Dean Hoffer, John Peoples, Brenna Flaugher, Douglas Tucker, Greg Bock, Jim Annis, Hugh Montgomery, Dale Knapp, Paul Philp, TJ Sarlina, Cristina Beldica, Wyatt Merritt, Jim Strait, Ed Temple, Chris Smith (by phone)

1) HQ Interactions: Feedback on Discussions with Headquarters [Kathy Turner / Hugh Montgomery/John Peoples/Brenna Flaugher]

See Agenda Item 2.

2) August 1 JOG meeting with Kathy and Nigel. I hopefully I will have some details on the NSF proposal, the Van Citters -Staffin meeting, and the August 10 meeting at NSF Headquarters [John Peoples]

John reported that he talked with Kathy at around 3PM CDT on August 1, at which time he learned that a Van Citters/Staffin phone call had occurred around 1:30PM CDT and had gone well. From this, John surmised that the DES would not go into the August 10 meeting looking bad.

Mont reported that he talked with Robin the day before and had pointed out to him that we were interested if there would be the expected funding for R&D for Data Management. Robin said that he was looking to hear from NSF that they were committed to DES. Robin did not want DOE moving forward with a project that NSF did not want to commit to.

John sent out the August 10 agenda to those who will be attending that meeting. (A copy is available on the OPMO website for today's DES WGM meeting at: http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_03/AgendafortheDESJOGofAugust10_v3_.pdf.) The agenda focuses on Data Management, on the interaction of Data Management with the Science WGs, and on the FNAL-NCSA-NOAO-DES MOU. The community pipeline will be a major component of the discussion of the MOU.

Kathy provided possible dates for the joint review: the week of January 28 or the week of February 4. It was noted that Todd Boroson would not be able to attend during the week of February 4. Brenna expressed the desire to lock down the dates in the week of January 28, but not all agreed. John agreed to poll everyone on these dates. Mont recommended that all should answer an unequivocal "yes" (i.e., we want to have this review, and, to first order, either of these two weeks is fine with us).

3) Discussion of the DES-Fermilab-NCSA-NOAO MOU with the DES Council (Mont, Boroson, Dunning) on August 1 [Hugh Montgomery/John Peoples]

John reported that has presented a version of the MOU to the 3 Directors. The MOU is still under development and is not ready to be signed. John would like to present an unsigned version at the August 10 meeting.

Mont reported that he has not yet read the MOU, although the other two Directors have forwarded him some comments. There is a sense that the current version is not too bad. There is clearly additional work needed in some areas, e.g. with DM. One of the more substantive discussions among the 3 Directors was on the DES observing plan described in the MOU. The current wording defines observing plan in three different and potentially inconsistent ways: (1) the survey area will cover 5000 sq deg, (2) the DES will be granted 30% of the observing time over a 5 year period, (3) the DES will achieve certain science goals. There was concern among the 3 Directors that this section of the MOU overconstrains itself: if you demand 5000 sq deg AND 30% observing time over a 5 year period AND achieving your science goals, there is a reasonable chance that one or more of these constraints will not be met. All 3 Directors agree that the ability to do science comes first. This section of the MOU needs some discussion in the text for the case in which the science goals are not achieved in a fixed time. E.g., Mont noted that the SDSS goals were defined in a certain way, and the original SDSS did not meet all its goals by the time of its completion on June 30, 2005 (in particular, there was still a big gap in the intended sky coverage); completing these goals was one of the drivers for SDSS extension, SDSS-II. Thus, there should be some recognition in the text of the MOU that sometimes fate is arrayed against a project.

John was less worried about the combination of these three constraints, and made these three comments: (1) With regards to the SDSS, ARC agreed for a 5-year program, but Jim Gunn proposed essentially a 10-year program; in the end, the SDSS goals were completed in 8 years. (2) The DES observing plan is fairly conservative, taking into account the possibility for 2 El Niños during the course of the survey. (3) The provision for 30% of the observing time over a 5-year period came from the Blanco Announcement of Opportunity; there will be a section in the MOU that will describe this particular constraint in detail.

Mont reported that both Todd and Thom said that the MOU is getting close to completion. Each of the 3 Directors will discuss this matter at next week's JOG meeting (the agenda of which contains but is not limited to the MOU). Mont promised he would give John his comments by Monday (August 6).

ACTION ITEM [Mont]: Send comments on the current draft of the MOU to John Peoples.

(Note from Mont: 1st comments sent; comments on new version of MOU being developed.)

4) Presentations for the August 10 meeting at NSF [John Peoples]

As noted under Agenda Item 2 above, the current version of the agenda is available on the OPMO website for today's DES WGM meeting at this URL:

10-Aug-07

http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_03/AgendafortheD ESJOGofAugust10_v3_.pdf.

John reported that the only major change from the previous version is that the comments from the 3 Directors have been made a major item.

5) DES/DECam Status Update [15 m; Brenna Flaugher]

Brenna's slides are available on the OPMO website for today's DES WGM meeting at this URL:

http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_03/PMG-Aug307.pdf.

Overall, progress is being made and there appeared to be no major problems. There was, however, some controversy on how the \$183K of ANL LDRD funds for engineering in FY08 and FY09 should be counted – should they be considered "in-kind" or should they be tracked as part of TPC. It was suggested that Brenna ask ANL whether ANL can provide these funds as an in-kind contribution. If ANL can, then these funds should be treated as in-kind; otherwise, they should be treated as a cost (and thus tracked in TPC).

Also during the discussion of this Agenda Item, Mont asked Brenna whether she has the monthly report for July, to which Brenna responded that she did. (Brenna showed the July report a bit later in the meeting.) Mont suggested that Brenna might want to hand out a monthly report at the August 10 meeting. Brenna countered that the monthly reports are rather dry and that she would prefer to hand out something more interesting.

In a discussion of what to put into CD-3a, Mont noted that MIE funds could be used before CD-2 for final design (but not for construction). If some of the \$3.6M in FY08 MIE funds is for final design, that part could be spent without inclusion in CD-3a. Brenna stated that she has already gone over it carefully and none of the \$3.6M is for design. Even so, Mont suggests that he, Greg, Dean, Ed, and Brenna look further into it and try to understand what from the \$3.6M could be called design; if DES is not 100% successful in the upcoming aggressive schedule of reviews, this could be a place where some contingency could be identified.

6) Plans and Activities for Supporting a DECam CD-2 Review [Wyatt Merritt / Brenna Flaugher]

Brenna described CD-2 Review plans in the last few slides from her presentation from Agenda Item 5 above. It was decided to have a full-blown Directors' Review of all three DES projects December 11-13. There was also considerable support for a Director's Review (note the placement of the apostrophe) of just the DECam project in early-November. This earlier review would focus on a "drill-down" of the costs and schedule of the DEC project. Having this earlier review of the DECam costs and schedule would help alleviate the time-crunch in the preparations for the late-January/early-February joint agency review. Ed noted that the TDR would need to be well along for a DECam Director's review in early November.

a) Status/Plans/Schedule for Preparing the Technical Design Report

See Wyatt's slides at

http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_03/DECamCD2Preparations-080307.pdf.

Wyatt reported significant progress on the TDR. Outlines and paragraphs have been added from all L2 managers (except for Optics). Sections have been fleshed out from new text or from the CDR (where available). The preparation of the TDR is on schedule. The targeted completion date is October 10.

b) Status/Plans/Progress Update on DECam CD-2 Documentation, MOUs

See Wyatt's slides at

http://www.fnal.gov/directorate/OPMO/Projects/DES/WGM/2007/08_03/DECamCD2Preparations-080307.pdf.

The target completion date for finishing the CD-2 documentation (October 16) is well in advance of both the December 11-13 Directors' Review and the proposed early-November DECam pre-review.

MOU drafts have been provided for UIUC, LBNL, UPenn, FNAL CD, and ANL.

- 7) Review Timeline [Dean Hoffer]
 - John reported that Robin's HEPAP talk gave September for CD-1 approval.
 - There are plans for an early-November DECam pre-Review drill-down. It need not have a large attendance. It is suggested that the review participants include Brenna, the DECam L2 managers, and the reviewers. It might also be desirable if Mont could attend. Available dates for Mont are October 28, 29 and November 1, 2, 3, 5, 6. (DLT: I may have recorded these dates inaccurately: Oct 28 is a Sunday and Nov 3 is a Saturday.)
 - The Directors' Review for CD-2/3a is planned for December 11-13.
 - The DOE/NSF Joint Review for CD-2/3a is planned either for the week of January 28 or for the week of February 4.
- 8) Next Meeting; August 17 [Dean Hoffer]

Action Items

New

- 1) Solidify dates for the CD-2 Directors' review. [Flaugher/Peoples/Hoffer] *Done.* (See Agenda Items 6 and 7, above)
 - 2) Continue consulting with Kathy and Nigel to identify all documents that will be needed from the non-DECam components of DES (i.e., DES DM and CFIP) for the joint CD2 review. [Peoples]

In progress.

Rollover

3) Report on any further discussion with OHEP on the need for EVMS reporting on DECam [Hugh Montgomery]

Tried, but the idea didn't float. This item can be removed.

4) Provide MINERvA Monthly Report as an example for DECam [Temple]

We now have a DECam one. (The DECam monthly reports for July was shown at the meeting; see Agenda Item 5, above.) It follows the format of MINVERvA's. There is an overview, plus each of the L2 managers provides a short report.

5) Meet to discuss / understand the separate need for obligation profile and cost profile information [Flaugher/Sarlina/Knapp/Hoffer]

Brenna has been talking with TJ and Dale on how they do this. There is a switch in the scheduler that allows one to switch to/from obligations.